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APPLICATION NO.	FI	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/830,686	•	08/03/2001	Keiji Yano	027650-928	9925	
21839	7590	10/09/2003		EXAMINER		
BURNS DO		WECKER & MAT	DURAND, PAUL R			
		22313-1404		ART UNIT PAPER NUMBER		
				3721		
				DATE MAILED: 10/09/2003		
					15	

Please find below and/or attached an Office communication concerning this application or proceeding.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Exercises of time may be available under the provision of 3° CPR 1.73(s). In no event, however, may a reply be timely filed Exercised of time may be available under the provision of 3° CPR 1.73(s). In no event, however, may a reply be timely filed Exercised for reply specified above is listed bath thiny (30) days, a reply within the statutory minimum of hinty (30) days, and the provision of the pro				
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Paul Durand 3721 - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. If the period for reply specified above is least than thirty (30) days, a reply within the statelory minimum of thirty (30) days will be comissed of disc communication. If the period for reply specified above is least than thirty (30) days, a reply within the statelory minimum of thirty (30) days will be communication. If the period for reply specified above is least than thirty (30) days, a reply within the statelory minimum of thirty (30) days will be communication. If the period for reply specified above is least than the remoths after the mailing date of this communication, which is the state of		09/830,686	YANO, KEIJI	
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A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the productors of 37 CFR 1.13(b), in no event, however, may a reply be timely filed. Extensions of time may be available under the productors of 37 CFR 1.13(b), in no event, however, may a reply be timely filed. Extensions of time may be available under the productors of 37 CFR 1.13(b), in no event, however, may a reply be timely filed. Extensions of time may be available under the productors of 37 CFR 1.13(b), in or event, however, may a reply be timely filed. Extension of the productor		Paul Durand	3721	
THE MAILING DATE OF THIS COMMUNICATION. Estationize of time may be waited under the provisions of 30°CFR 1.13(6). In ne event, however, may a reply be timely filed after EX (6) MONTHIS from the mailing date of this communication. I statistically the extended period of the communication of the extended period of the communication. I no period to reply suight the set or estanded period for reply will, by altitude, cause the application to become ARANDONED (35 U.S. C.§ 13.13). Any reply received by the Office inter than these months detrive the mailing date of this communication, even if timely filed, may reduce any seasoned palaent term eliquiament. Sea 30°CFR 1.70(b). Status 1) Responsive to communication(s) filed on 21 August 2002. 2a) This action is FINAL. 2b) This action is FINAL. 2b) This action is reply suited the seasoned palaent term eliquiament. Sea 30°CFR 1.70(b). Status 4) Claim(s) 9-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 4a) Of the above claim(s) is/are withdrawn from consideration. 5 Claim(s) 9-28 is/are rejected. 7 Claim(s) 9-28 is/are allowed. 6) Claim(s) 9-28 is/are allowed. 6) Claim(s) 9-28 is/are rejected. 7 Claim(s) is/are allowed. 8 Claim(s) 9-28 is/are rejected. 9 The specification is objected to by the Examiner. 10) The drawing(s) filed on 03 August 2001 is/are. all accepted or bloeted to by the Examiner. Application Papers 9 The drawing(s) filed on 03 August 2001 is/are. all accepted or bloeted to by the Examiner. 11) The proposed drawing correction filed on is soliced to by the Examiner. 12) The earth or declaration is objected to by the Examiner. 13 All bloed or drawings are required in reply to this Office action. 14 proved, corrected drawings are required in reply to this Office action. 15 Priority under 35 U.S.C. § 119 and 120 13 All bloed copies of the priority documents have been received in Application No	•	ppears on the cover sheet t	vith the correspondence addres	is
2a) This action is FINAL. 2b) This action is non-final. 3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 9-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are objected to. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Applicantion Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on <u>03 August 2001</u> is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1	THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a re - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	l. 1.136(a). In no event, however, may of the ply within the statutory minimum of the d will apply and will expire SIX (6) MO to, cause the application to become	a reply be timely filed irty (30) days will be considered timely. DNTHS from the mailing date of this communication (35 U.S.C. § 133).	inication.
3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) ◇ Claim(s) 9-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5 Claim(s) is/are allowed. 6) ◇ Claim(s) 9-28 is/are rejected. 7 Claim(s) is/are objected to. 8) ○ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) ◇ The drawing(s) filed on 03 August 2001 is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) □ The proposed drawing correction filed on is: a) □ approved b) □ disapproved by the Examiner. If approved, corrected drawings are required in reply to this Office action. 12) □ The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. §§ 119 and 120 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) □ Some * c) □ None of: □ □ Certified copies of the priority documents have been received. 2 □ Certified copies of the priority documents have been received in Application No 3 ☒ Copies of the certified copies of the priority documents have been received. 14) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) □ The translation of the foreign language provisional application has been received. 15) □ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) Notice of References Cited (PTO-892) b) Notice of Informal Patent Application (PTO-152)	1) Responsive to communication(s) filed on <u>01</u>	! August 2003 .		
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) \(\times \times \frac{9-28}{2}\) is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) \(\times \times \frac{1}{2}\) Claim(s) is/are allowed. 6) \(\times \times \times \frac{1}{2}\) is/are rejected. 7) \(\times \times \times \frac{1}{2}\) Claim(s) is/are objected to. 8) \(\times	2a)☐ This action is FINAL . 2b)⊠ T	This action is non-final.		
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6) ☐ Claim(s) 9-28 is/are rejected. 7) ☐ Claim(s)	<u> </u>	awii iioiii consideration.		
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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/21/03 has been entered.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 9-11,14-17,20-24,27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadler (US 5,231,817) in view of Fielibert (US 3,679,509) in further view of Condo et al (US 3,381,441).

In regard to claims 9,16 and 22, Sadler discloses the invention substantially as claimed including a heat sealing device as part of a vertical form and fill machine, comprised of a operation jaw 30, with a flat surface, facing the seal zone, a counter jaw 31, comprised of a curved surface 56, facing the seal zone, that transversely seals a package 99 filled with a liquid, the seal jaws 30 and 31 being able to collapse the tube

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and remove the air from the pouch before sealing (see Figs. 1, 2a, 2b, Abstract, C3, L8-27 and C4, L33-35). What Sadler does not disclose is the use of a curved operation surface that is in the seal zone and the specific sealing of the package while moving the liquid during sealing. However, Fielibert teaches that it is old and well known in the art of sealing packages to provide a sealing apparatus with a sealing head comprised of sealing members 9 and 11, comprised of flat sealing surface 10, chevron shaped surfaces 12 and 13, that faces and contacts the seal zone for the purpose of providing a sealed area that is free from contaminants (see Figs.1,2 and C3, L6-14). Furthermore, Condo teaches that it is old and well known in the art to provide a sealing machine with means for flatten the tube prior to sealing for the purpose of removing the liquid from the sealing area of a package (see C2, L10-18). Therefore, it would have been obvious to

In regard to claims 10, 11, 17, 23 and 24, Sadler discloses the invention as claimed including a counter jaw 30 with a curved surface 56 that is in the form of a chevron

one having ordinary skill in the art to have modified the invention of Sadler with the

flattening means as taught by Condo for the purpose of increasing sealing capability.

In regard to claims 15 and 28, Sadler discloses the invention as claimed including a resistance body 30 for forming a seal zone (see Figs. 2a, 2b). Furthermore, the Examiner gives little patentable weight to the packaging material being comprised of a metal and thermoplastic layer since the intended use of the device is independent of the material used to package the product.

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In regard to claims 14,20 and 27, Sadler discloses the invention substantially as claimed including resistance heating device for sealing members 30. What Sadler does not disclose is ultrasonic heating means for sealing packages. However Condo teaches that it is old and well known in the art to provide a sealing machine with an ultrasonic sealing device 19 with sealing member 20, heated by ultrasonic waves for the purpose of increasing manufacturing efficiency (see Figs. 1,5,8 and C3, L63-68). Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Sadler with the ultrasonic heating means for sealing packages as taught by Condo for the purpose of increasing manufacturing efficiency.

In regard to claims 15 and 27, the Examiner gives little patentable weight to the packaging material being comprised of a metal and thermoplastic layer since the intended use of the device is independent of the material used to package the product.

4. Claims 12, 18, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadler in view of Fielibert in further view of Fukuda (US 5,347,795).

Sadler discloses the invention substantially as claimed including sealing members 30 and 31. What Sadler does not disclose is a sealing member that is comprised of ridge formed at the operation surface. However, Fukuda teaches that it is old and well known in the art to provide transverse sealing members with sealing members 20 that are in the form of discontinued ridges for the purpose of increasing manufacturing efficiency (see Fig. 13). Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Sadler with ridged

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sealing members as taught by Fukuda for the purpose of increasing manufacturing efficiency.

5. Claims 13, 19 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sadler in view of Fielibert in further view of Konno et al (US 5,787,690).

Sadler discloses the invention substantially as claimed including resistance heating device for sealing members 30. What Sadler does not disclose is inductance heating means for sealing packages. However Konno teaches that it is old and well known in the art to provide a sealing machine with a transverse sealing device 1 with sealing member 35 and 36, heated by inductor 19 for the purpose of increasing manufacturing efficiency (see Figs. 4-7 and C2, L20-29). Therefore, it would have been obvious to one having ordinary skill in the art to have modified the invention of Sadler with the inductance heating means for sealing packages as taught by Konno for the purpose of increasing manufacturing efficiency.

In regard to claims 13 and 26, the Examiner gives little patentable weight to the packaging material being comprised of a metal and thermoplastic layer since the intended use of the device is independent of the material used to package the product.

Response to Arguments

6. Applicant's arguments with respect to claims 8-29 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wirsig et al, Hayashi et al and Anderson have been cited to show devices having similar structure.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Durand whose telephone number is 703-305-4962. The examiner can normally be reached on 0730-1800, Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I Rada can be reached on 703-308-2187. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Paul Durand October 2, 2003

Rinaldi I. Rada Supervisory Patent Examiner Group 3700

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